

## CLAIMS

We claim:

- 1           1.       A keypad, comprising:  
2           a plurality of keys; and  
3           a flexible carrier contacting the plurality of keys, the flexible carrier having openings  
4           therein between the plurality of keys.
- 1           2.       The keypad of claim 1, wherein the openings between the plurality of keys do not  
2           contact the plurality of keys.
- 1           3.       The keypad of claim 1, wherein the plurality of keys are formed as a unitary part  
2           of the flexible carrier.
- 1           4.       The keypad of claim 1, further including attachment means for attaching the  
2           plurality of keys to the flexible carrier.
- 1           5.       The keypad of claim 1, wherein at least some of the openings are cruciform-  
2           shaped.
- 1           6.       The keypad of claim 1, wherein at least some of the openings are round.
- 1           7.       The keypad of claim 1, wherein at least some of the openings are oval shaped.
- 1           8.       The keypad of claim 1, wherein at least two of the openings have different shapes.
- 1           9.       The keypad of claim 1, wherein the openings divide the flexible carrier into  
2           multiple parts.
- 1           10.      The keypad of claim 9, wherein the multiple parts are multiple columns.
- 1           11.      The keypad of claim 9, wherein the multiple parts are multiple rows.
- 1           12.      The keypad of claim 9, wherein the multiple parts have a zig-zag shaped edge.
- 1           13.      The keypad of claim 1, wherein the openings divide the flexible carrier into at  
2           least two serpentine-shaped parts.
- 1           14.      The keypad of claim 1, wherein the openings form at least one slot in the flexible  
2           carrier.
- 1           15.      The keypad of claim 1, the flexible carrier having cutouts in an outer perimeter of  
2           the flexible carrier.
- 1           16.      The keypad of claim 15, wherein the cutouts in the outer perimeter occur in  
2           accordance with locations of the plurality of keys.

- 1 17. The keypad of claim 1, wherein the openings in the flexible carrier occur in  
2 accordance with locations of the plurality of keys.
- 1 18. The keypad of claim 1, wherein the openings serve to decouple the plurality of  
2 keys from each other.
- 1 19. The keypad of claim 1, wherein at least one of the plurality of keys is tactilely  
2 differentiated from others of the keys.
- 1 20. The keypad of claim 1, wherein at least one of the plurality of keys are domed.
- 1 21. The keypad of claim 1, wherein at least one of the plurality of keys is bowl-  
2 shaped.
- 1 22. The keypad of claim 1, wherein at least one of the plurality of keys has an  
2 inverted dimple thereon.
- 1 23. The keypad of claim 1, wherein at least one of the plurality of keys has a peak  
2 thereon.
- 1 24. A keypad, comprising:  
2 a plurality of keys, each key having an actuator; and  
3 a flexible carrier surrounding the plurality of keys and having an opening for each  
4 actuator and having additional openings between the actuators, the additional  
5 openings serving to decouple the plurality of keys.
- 1 25. The keypad of claim 24, wherein at least one of the actuators contacts a snap  
2 dome when the actuator is in a pressed condition.
- 1 26. The keypad of claim 24, wherein the openings between the plurality of keys do  
2 not contact the plurality of keys.
- 1 27. The keypad of claim 24, wherein at least some of the additional openings are  
2 cruciform-shaped.
- 1 28. The keypad of claim 24 wherein at least some of the additional openings are  
2 round.
- 1 29 The keypad of claim 24 wherein at least some of the additional openings are oval  
2 shaped.
- 1 30. The keypad of claim 24 wherein at least two of the additional openings have  
2 different shapes.

- 1 31. The keypad of claim 24 wherein the additional openings divide the flexible carrier  
2 into multiple parts.
- 1 32. The keypad of claim 31, wherein the multiple parts are multiple columns.
- 1 33. The keypad of claim 31, wherein the multiple parts are multiple rows.
- 1 34. The keypad of claim 31, wherein the multiple parts have a zig-zag shaped edge.
- 1 35. The keypad of claim 24, wherein the openings divide the flexible carrier into at  
2 least two serpentine-shaped parts.
- 1 36. The keypad of claim 24, wherein the openings form at least one slot in the  
2 flexible carrier.
- 1 37. The keypad of claim 24, an edge of the flexible carrier having cutouts in an outer  
2 perimeter of the edge.
- 1 38. The keypad of claim 37, wherein the cutouts in the flexible perimeter occur in  
2 accordance with locations of the plurality of keys.
- 1 39. The keypad of claim 24, wherein the openings in the flexible carrier occur in  
2 accordance with locations of the plurality of keys.
- 1 40. The keypad of claim 24, wherein the openings serve to decouple the plurality of  
2 keys from each other.
- 1 41. The keypad of claim 24, wherein at least one of the plurality of keys is tactilely  
2 differentiated from others of the keys.
- 1 42. A keypad, comprising:  
2 a plurality of keys; and  
3 a flexible carrier contacting the plurality of keys, the flexible carrier being divided  
4 into at least two pieces, the divisions occurring between the plurality of keys.
- 1 43. The keypad of claim 42, wherein the flexible carrier is divided into at least two  
2 serpentine-shaped pieces.
- 1 44. The keypad of claim 42, wherein the flexible carrier also has additional openings  
2 therein to increase the decoupling between the keys.
- 1 45. The keypad of claim 42, wherein at least one of the plurality of keys is tactilely  
2 differentiated from others of the keys.
- 1 46. A keypad assembly, comprising:  
2 a plurality of keys;

3 key support means for supporting the plurality of keys; and

4 key decoupling means located between the plurality of keys.

1 47. The keypad assembly of claim 46, wherein the key decoupling means is a flexible  
2 carrier having openings in its interior.

1 48. The keypad assembly of claim 46, wherein the key decoupling means is a  
2 flexible carrier having cutouts in its perimeter.

1 49. The keypad of claim 46, wherein at least one of the plurality of keys is tactilely  
2 differentiated from others of the keys.